Amendments to the Claims

These claims will replace all prior versions, and listings, of claims in the application:

1. (previously presented) A system for providing streaming fine granular scalability coded video data, comprising:

a server for sending fine granular scalability coded video data into a data network through a plurality of channels;

a receiver having a first network analyzer that monitors network congestion conditions of the data network at the receiver, and dynamically modifies subscriptions to a predetermined number of the plurality of the channels based on the monitored congestion conditions of the data network at the receiver; and

an adaptive node having a second network analyzer that accounts for the number of the channels subscribed to by the receiver.

2. (Previously presented) The system of claim 1 wherein the adaptive node further comprises a mass data store capable of buffering data.

3. (Original) The system of claim 1 wherein the adaptive node comprises a plurality of adaptive nodes, wherein at least one of the plurality of adaptive nodes is upstream of at least one other of the plurality of adaptive nodes.

4. (Original) The system of claim 1 wherein the second network analyzer merges channel control signals received from other receivers and forwards the merged channel control signals to

an upstream peer in order to dynamically modify transmission of the subscribed channels to the receiver.

5. (Original) The system of claim 4 wherein the upstream peer comprises the server.

6. (Original) The system of claim 1 wherein the receiver is a plurality of receivers.

7. (Previously presented) A method for streaming fine granular scalability coded video data, comprising:

providing a server for sending fine granular scalability coded video data into a data network through a plurality of channels;

perceiving network congestion conditions of the data network at a receiver using a network analyzer included with the receiver;

dynamically modifying subscriptions to a predetermined number of the plurality of the channels based on the perceived congestion conditions of the data network at the receiver; and

accounting for the number of the channels subscribed to by the receiver at an adaptive node.

8. (currently amended) A method for transmitting streaming fine granular scalability coded video data, comprising:

disposing an adaptive node logically intermediate a server and a receiver in a data network;

initiating communication between the server and the receiver over the data network logically through the adaptive node;

subscribing to one or more channels by the receiver based on network capacity as perceived by the receiver, each channel corresponding to a predetermined data layer of a plurality of data layers comprising the streaming fine granular scalability coded video data available at the server;

initiating end-to-end communication channels between the server and the receiver over the data network for each subscribed channel logically through the adaptive node;

recognizing by the adaptive node of the channels subscribed to by receivers downstream of the adaptive node operatively disposed intermediate the server and the receiver;

sending a predetermined number of data layers of the plurality of data layers by the server into the data network ~~via their respective channels~~;

monitoring the network capacity at the receiver;

monitoring the network capacity at the adaptive node;

modifying transmission of the subscribed channels at the receiver based on network capacity as perceived by the receiver; and

modifying transmission of the subscribed channels through the adaptive node to the receiver based on network capacity as perceived by the adaptive node.

9. (previously presented) The method of claim 8, wherein the step of subscribing further comprises:

coding a portion of the streaming fine granular scalability coded video data to produce a base layer frame;

generating a motion compensated residual image from the streaming fine granular scalability coded video data and the base layer frame using a fine granular coding technique; and

generating an enhancement layer using the motion compensated residual images, the

enhancement layer comprising a plurality of layers, each layer comprising at portion of the motion compensated residual images.

10. (Original) The method of claim 8 further comprising buffering the base layer frame and the enhancement layer at the adaptive node.

11. (previously presented) The method of claim 9 wherein the buffering further comprises: requesting retransmissions from an upstream node; and responding to retransmission requests from a downstream node.

12. (previously presented) The method of claim 8 further comprising: receiving layer data at a first rate from an upstream source of data; and forwarding the layer data at a second rate to a downstream receiver of the data.

13. (Original) The method of claim 8 wherein the adaptive node handles a subscription request of a client disposed logically downstream of the adaptive node.

14. (Original) The method of claim 13 wherein the client comprises at least one of a receiver and a second adaptive node.

15. (previously presented) The method of claim 13, wherein the handling comprises: receiving a subscription request from the receiver at the adaptive node; calculating a maximum subscription level by the adaptive node; and propagating the maximum subscription level by the adaptive node to a next peer upstream.

16. (previously presented) An adaptive node for use in a streaming video data system, comprising:

a data communications interface for operatively connecting to a data network;

a network analyzer for:

perceiving network congestion conditions of the data network at the adaptive node; and

based on the perceived network congestion conditions, dynamically modifying transmission of data channels from a source of data channels disposed logically upstream of the adaptive node to a client logically disposed downstream of the adaptive node.

17. (Original) The adaptive node of claim 16 further comprising a buffer.

18. (Original) The adaptive node of claim 17 wherein the buffer comprises a mass data storage device.

19. (Original) The adaptive node of claim 16 wherein the adaptive node is capable of at least one of receiving requests from a downstream receiver, selectively forwarding requests upstream, receiving data from upstream sources, and selectively forwarding data downstream.

20. (Original) The adaptive node of claim 16 wherein the client comprises at least one of a receiver and an adaptive node.